HP Z620 Workstation

Versatility redefined, still compact.

Big possibilities. Compact form factor.

With its innovative design, the HP Z620 Workstation gives you a near silent computing solution in a form factor that's a perfect fit for space-constrained environments. And for easy servicing and upgrades, it features a completely tool-less chassis with integrated handles and a tool-free power supply.

The performance you demand.

Get massive system performance with a small footprint. The HP Z620 features the next evolution in processor technology and system architecture, setting the standard for versatility with support for both Intel® Xeon® processor E5-2600 v2 and E5-1600 v2 families.[1,2,3,4] Now with up to 24 cores, the HP Z620 powerhouse supports a full range of processors, to help you get more done every minute.

Bring your ideas to life faster.

The HP Z620 is designed to support next generation PCI express Gen3 graphics technology that doubles the bandwidth in and out of the card. The HP Z620 offers a huge variety of professional graphics from NVIDIA and AMD— from Pro 2D to Extreme 3D. And with 800W 90% efficient power supply and support for up to 8 displays, the HP Z620 gives you the freedom of doing and seeing more.

Modify your machine.

Customize the HP Z620 Workstation the way you want to with a variety of expansion options, including USB 3.0 for blazing fast speeds and up to 12 memory slots capable of supporting 96GB of the latest generation of DDR3 memory. With 3 internal drive bays and 2 external bays, choose from a variety of storage types including SATA 7.2K/10K, SAS 10K/15K and SSD.

HP recommends Windows.

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Form Factor	Rackable minitower
Available Operating Systems	Windows 7 Professional 32-bit* Windows 7 Professional 64-bit* Windows 7 Ultimate 64-bit* Windows 8 Pro 64-bit Windows 8 Pro Downgrade to Windows 7 Professional 32-bit Windows 8 Pro Downgrade to Windows 7 Professional 64-bit HP Linux Installer Kit Red Hat Enterprise Linux Desktop/Workstation (1 year paper license; no preinstalled OS)

Available Processors[1,2,3,4]

Processor	GHz	Cache	Memory	Cores	Hyper-Threading	Intel® vPro™ Technology	Intel® Turbo Boost Technology[5]
Intel® Xeon® Processor E5-2690	2.9	20 MB	1600 MHz	8	Y	Y	4, 9
Intel Xeon Processor E5-2680	2.7	20 MB	1600 MHz	8	Y	Y	4, 8
Intel Xeon Processor E5-2670	2.6	20 MB	1600 MHz	8	Y	Y	4, 7
Intel Xeon Processor E5-2667	2.9	15 MB	1600 MHz	6	Y	Y	3, 6
Intel Xeon Processor E5-2665	2.4	20 MB	1600 MHz	8	Y	Y	4, 7
Intel Xeon Processor E5-2660	2.2	20 MB	1600 MHz	8	Y	Y	5, 8
Intel Xeon Processor E5-2650	2.0	20 MB	1600 MHz	8	Y	Y	4, 8
Intel Xeon Processor E5-2643	3.3	10 MB	1600 MHz	4	Y	Y	1, 2
Intel Xeon Processor E5-2640	2.5	15 MB	1333 MHz	6	Y	Y	3, 5
Intel Xeon Processor E5-2630	2.3	15 MB	1333 MHz	6	Y	Y	3, 5
Intel Xeon Processor E5-2620	2.0	15 MB	1333 MHz	6	Y	Y	3, 5
Intel Xeon Processor E5-2609	2.4	10 MB	1066 MHz	4	N	Y	N/A
Intel Xeon Processor E5-2603	1.8	10 MB	1066 MHz	4	N	Y	N/A
Intel Xeon Processor E5-1660	3.3	15 MB	1600 MHz	6	Y	Y	3, 6
Intel Xeon Processor E5-1650	3.2	12 MB	1600 MHz	6	Y	Y	3, 6
Intel Xeon Processor E5-1620	3.6	10 MB	1600 MHz	4	Y	Y	2, 3
Intel Xeon Processor E5-1607	3.0	10 MB	1066 MHz	4	N	Y	N/A
Intel Xeon Processor E5-1603	2.8	10 MB	1066 MHz	4	N	Y	N/A

Chipset	Intel® C602 Chipset
Memory[6]	Up to 12 DIMM slots with 2 CPUs, up to 192 GB, 8-channel ECC DDR3 1600 MHz; 4 channels per CPU
Drive Controllers	Integrated 6-channel SATA controller: 2 ports 6 Gb/s + 4 ports 3 Gb/s, RAID 0, 1, 5, 10 capable; Optional SAS controllers: LSI 9212-4i 4-port SAS & LSI 9717-4i4e 8-port SAS; both 6 Gb/s RAID 0, 1, 10 capable
Storage[7,8]	Up to (4) 3.5-inch 7200 rpm SATA drives: 250, 500 GB, 1, 2, 3 TB, 12 TB max; Up to (4) 2.5-inch 10K rpm SATA drives: 250, 500 GB, 1 TB, 4 TB max; Up to (4) 2.5-inch 10K rpm SAS drives: 300, 600, 900 GB, 3.6 TB max; Up to (4) 3.5-inch 15K rpm SAS drives: 300, 450, 600 GB, 2.4 TB max; Up to (4) 2.5-inch SATA solid state drives: 128, 256, 512 GB, 2 TB max; Up to (1) 2.5-inch SATA self-encrypting solid state boot drive (SED SSD): 256 GB, 256 GB max; Up to (1) 2.5-inch SATA self-encrypting hard drive (SED HDD): 500 GB, 500 GB max; Note: Fourth drive occupies one external 5.25-inch bay
Optical Storage[9,10]	DVD-ROM, DVD+/-RW, Slot-load DVD+/-RW, Blu-ray Writer, 22-in-1 Media Card Reader
Drive Bays	2 external 5.25-inch bays, 3 internal 3.5-inch bays, Note: Fourth HDD occupies one external bay
Expansion Slots	2 PCI Express Gen3 x16; 1 PCI Express Gen3 x8, 1 PCI Express Gen2 x8 mechanical/x4 electrical; 1 PCI Express Gen2 x4 mechanical/x1 electrical; 1 Legacy PCI
Available Graphics	Professional 2D: NVIDIA NVS 300, NVIDIA NVS 310, NVIDIA NVS 510 Entry 3D: NVIDIA Quadro 410, NVIDIA Quadro K600, AMD FirePro™ V3900 Mid-range 3D: NVIDIA Quadro K2000 High-end 3D: NVIDIA Quadro K4000, AMD FirePro™ W7000, NVIDIA Quadro K5000, NVIDIA Quadro 6000, NVIDIA Tesla C2075, NVIDIA Tesla K20c
Audio	Creative Recon3D PCIe Audio Card, Integrated Intel/Realtek HD ALC262 Audio, optional HP Thin USB Powered Speakers
Network	Dual integrated Intel GbE LAN; Infineon TPM 1.2 Controller; Optional Broadcom GbE NIC; Optional Intel GbE NIC; Optional HP X520 10GbE Dual Port NIC
Ports	Front: 2 USB 3.0, 1 USB 2.0, 1 IEEE 1394a standard, 1 microphone in, 1 headphone out, HP 22-in-1 Media Card Reader (optional) Rear: 2 USB 3.0, 4 USB 2.0, 1 audio in, 1 audio out, 1 microphone in, 2 PS/2, 2 RJ-45 to integrated Gigabit LAN, 1 serial via optional adapter, Rear power button with LED Internal: 6 USB 2.0
Input Devices	HP PS/2 keyboard, HP USB keyboard, HP USB Smart Card Keyboard, HP PS/2 mouse, HP USB optical mouse, USB 1000dpi laser mouse, HP USB optical 3-button mouse, USB SpaceMouse Pro, USB SpacePilot Pro
Dimensions (H x W x D)	17.5 x 6.75 x 18.3 in (44.45 x 17.15 x 46.48 cm)
Power Supply	800 Watt 90% efficient tool-free power supply
Compatible Displays (screen size diagonally measured)	HP DreamColor LP2480zx Professional Display (24-inch diagonal widescreen), HP ZR30w 30-inch S-IPS LCD Monitor, HP ZR2740w 27-inch LED Backlit IPS Monitor, HP R2440w 24-inch LED Backlit IPS Monitor, HP LP2475w 24-inch Widescreen LCD Monitor, HP ZR2240w 21.5-inch LED Backlit IPS Monitor, HP ZR2040w 20-inch LED Backlit IPS Monitor
Warranty[11]	Limited three-year Mon-Fri 8-5 next business day, parts, labor and 24x7 phone support, terms and conditions may vary. Extendable up to five years.

Screen images courtesy of Autodesk.

* This system may require upgraded and/or separately purchased hardware and/or a DVD drive to install the Windows 7 software and take full advantage of Windows 7 functionality. See microsoft.com/windows/windows-7/ for details.

1 Multi-Core technologies are designed to improve performance of multithreaded software products and hardware-aware multitasking operating systems and may require appropriate operating system software for full benefits; Not all customers or software applications will necessarily benefit from use of these technologies.

2 64-bit computing on Intel® architecture requires a computer system with a processor, chipset, BIOS, operating system, device drivers and applications enabled for Intel® 64 architecture. Processors will not operate (including 32-bit operation) without an Intel® 64 architecture-enabled BIOS. Performance will vary depending on your hardware and software configurations. See intel.com/info/em64t for more information.

3 Intel's numbering is not a measurement of higher performance.

4 Z620 systems configured with E5-1600 series processors may not add a 2nd processor. To support two processors, E5-2600 series processor must be chosen.

5 The specifications shown in this column represent the following: (all core maximum turbo steps, one core maximum turbo steps). Turbo boost stepping occurs in 100MHz increments. Processors that do not have turbo functionality are denoted as N/A. Intel® Turbo Boost technology requires a PC with a processor with Intel® Turbo Boost capability. Intel® Turbo Boost performance varies depending on hardware, software, and overall system configuration. Please visit intel.com/technology/turboboost for more information.

6 Each processor supports up to 4 channels of DDR3 memory. To realize full performance at least 1 DIMM must be inserted into each channel.

7 SATA hardware RAID is not supported on Linux systems. The Linux kernel, with built-in software RAID, provides excellent functionality and performance. It is a good alternative to hardware-based RAID. Please visit h20000.www2.hp.com/bc/docs/support/SupportManual/c00060684/c00060684.pdf for RAID capabilities with Linux

8 For hard drives and solid state drives, GB=1 billion bytes. TB= 1 trillion bytes. Actual formatted capacity is less. Up to 36 GB is reserved for system recovery software.

9 Actual speeds may vary. Does not permit copying of commercially available DVD movies or other copyright protected materials. Intended for creation and storage of your original material and other lawful uses. Note that DVD-RAM cannot read or write to 2.6 GB Single Sided/5.2 GB Double Sided – Version 1.0 media.

10 As Blu-ray is a new format containing new technologies, certain disc, digital connection, compatibility and/or performance issues may arise, and do not constitute defects in the product. Flawless playback on all systems is not guaranteed. In order for some Blu-ray titles to play, they may require a DVI or HDMI digital connection and your display may require HDCP support. HD DVD movies cannot be played on this workstation.

11 HP Care Pack Services extend service contracts beyond the standard warranties. Service starts from date of hardware purchase. To choose the right level of service for your HP product, use the HP Care Pack Services Lookup Tool at hp.com/go/lookuptool. Additional HP Care Pack Services information by product is available at hp.com/go/carepack. Service levels and response times for HP Care Packs may vary depending on your geographic location.

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